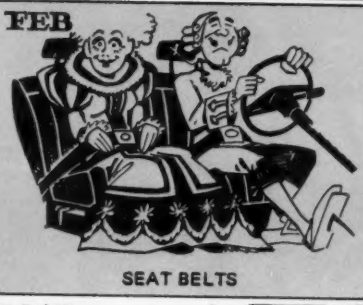
DRIVER

SNOWMOBILES

JANUARY 1976

1776 BICENTENNIAL SAFETY YEAR 1976

WINTER DRIVING



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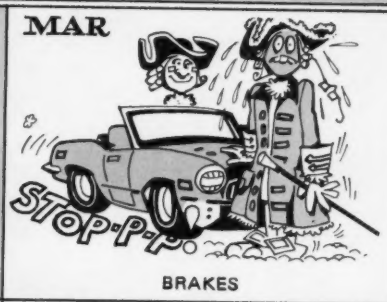

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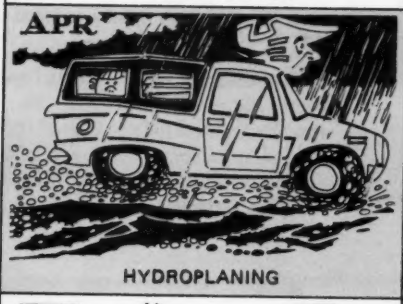

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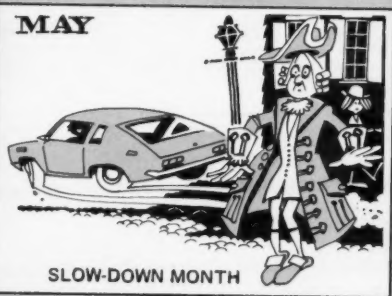
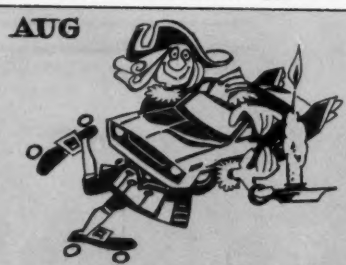


SLOW-DOWN MONTH

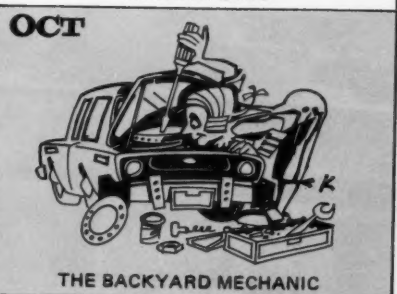
PROTECTIVE CLOTHING

WATER SPORTS



ENERGY CONSERVATION

BACK-TO-SCHOOL



THE BACKYARD MECHANIC

NIGHT DRIVING

DRUNK DRIVING . . . DON'T!

When the snowmobile first arrived from Canada about 20 years ago, it stole a lot of hearts. Not only was it an exciting means for winter fun but it was also great transportation for trappers, farmers, game wardens and police. It let people go places they could reach before only by foot or helicopter.

Ten years later, however, snowmobiling as a sport hadn't really "taken off" as the fans and manufacturers expected. Noise, smoke and low dependability, plus difficulty in getting spare parts, discouraged a lot of the early participants. In 1968, more than 100 firms were building the sleds. Today there are 13, and only 11 are active enough to display at this year's trade show. For the past two years, large inventories of unsold machines led builders to slow down production.

(below)
Alaskan Air Command uses its Traffic Safety multi-media equipment to teach snowmobiling. This class at Elmendorf AFB includes dependents, who receive certificates of competency on successful completion. Courses like this have greatly reduced the number of accidents.

Photo courtesy Hank Taylor, Alaskan Air Command

But now that the 1976 models are here, there's bound to be a new wave of enthusiasm for this thrilling sport. For one thing, the '76 machines are more than 90% quieter than those made only seven years ago. (They will not exceed a maximum sound level of 78 decibels at 50 feet, if you're into that kind of talk.)

The new models also meet safety standards established by the Snowmobile Safety and Certification Committee. The SSCC is an organization formed by the snowmobile industry and open to all persons and groups concerned about safety in snowmobiling. The '76s also are offering many new performance features plus improved dependability.

WHAT'S IT TO YOU?

So, there you sit at a warm Florida base or on a ship in the sunny Mediterranean and you've never even seen a snowmobile. Well, one of these days, military life being what it is, you're likely to find yourself at a station where four feet of snow has covered the tennis courts by Halloween and you're wondering what to do with yourself. That's when you're going to run into snowmobiling.

If you're lucky enough to be at an Air Force Base like Elmendorf or Eilson in Alaska or Kincheloe in Michigan, all you have to do is put yourself in the hands of the on-the-ball safety people. Their fine orientation and training programs will teach you all you need to know. But if you're taking the sport up on your own, there are some things you'll have to learn by reading.

THE MACHINE

In its very simplest form, the snowmobile is an endless track which grips the surface and moves the vehicle. Bicycle-type handle bars connected to two front-mounted skiis provide the steering. A thumb-controlled throttle is located on the handlebar. The brakes are similar to those on a bicycle.

Generally, the controls on a snowmobile include the throttle, emergency stop switch, brake, ignition or start switch, lighting switches, choke, starter and the steering system which consists of skiis, spindles and arms, tie rods and the steering handle.

Newer machines are equipped with an emergency stop switch so the operator has a convenient and alternate system that will provide immediate interruption of the engine ignition system.

Safety features include headlights and taillights, reflectors, shields and guards to keep hands and clothing away from moving parts and hot components, and windshields (much wider on newer models).

The most popular snowmobile in terms of power seems to be the 340 cc. These machines deliver from 28 to 35

continued

THE SNOWMOBILE

It's just an engine-driven, endless track and a pair of steerable skiis. But be careful!! One ride and you may forget all about bowling, tennis, hang gliding . . .

DRIVER

THE TRAFFIC SAFETY MAGAZINE FOR THE MILITARY DRIVER

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Norton Air Force Base, California 92409

Lt Gen DONALD G. NUNN
The Inspector General, USAF

PUBLISHED IN COOPERATION WITH THE DEPARTMENT OF THE ARMY AND THE DEPARTMENT OF THE NAVY

Dr. FRANCIS S. McGLADE
Director of Safety
United States Army

Brig Gen RICHARD E. MERKLING
Director
Aerospace Safety, USAF

RADM WM. ELLIS
Commander,
Naval Safety Center

Capt. TOBIAS van ROSSUM DAUM
Editor

VIRGINIA HENDRIX
Managing Editor

SSgt DON HOLT
Technical Editor

FRANCIS R. FOWLER
Feature Editor

DON KELLEHER
Art Director

MSgt BILL FOSTER
Staff Artist

MSgt MIKE KEEFE
Staff Photographer

ALICE MILKEY
Editorial Administration

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Certain individuals shown in this magazine are not members of the Air Force and therefore do not conform to Air Force grooming standards.

THE EDITOR SPEAKS

DOUBLE CLUTCH

SHOP THE SALES

There are two ways to save money on your car or cycle: One is to do at least the simple maintenance jobs yourself. The other is to shop the specials in the newspaper ads.

Batteries are a good example of an item you can save money on. But many drivers don't even think about buying a new battery until their present one dies. Because they want the last bit of power from their battery, less than a dollar's worth, car owners end up paying for a road call and buying a battery without any chance for comparison pricing. So they pay $10 or so more than if they had watched the ads.

How's your battery right now? Most batteries get through two winters all right, but watch out if this is the third one.

Tires are another item you should shop for. They don't get bald overnight. Take your time and plan for their replacement.

Offering items at or even below cost is not unusual for some stores. They want to get you into the store and turn you into a regular customer.

Of course, you have to be wary of prices that are *too* low. Patronize outlets you have reason to believe are reliable. And if you ever do get taken, don't hesitate to inform your state's Consumer Protection Agency, local Better Business Bureau, and local newspaper.

NEXT MONTH
Jacked Back

horsepower, depending on the make. Most buyers want light machines and some manufacturers try to please. One compact model this year weighs only 297 pounds, light for a new machine.

Last year, some companies introduced liquid-cooled snowmobile engines and others followed this year. Liquid cooling is tops for damping sound because the engine can be enclosed; it doesn't need airflow for cooling.

The average size fuel tank is six gallons and you'll get anywhere from 10 to 20 miles per gallon. Most two-cycle engines must have their lubrication oil pre-mixed with the gasoline, although some have injection systems.

You will learn about fuel and other important items by studying the owner's manual. If you're renting the snowmobile, insist on a thorough briefing before you leave. Most machines have minor but frequent breakdowns. You will want to carry a few spare parts – usually a couple of spark plugs, a plug wrench, a spare drive belt and some drive chain repair links, light bulbs, pliers, and a screwdriver. Depending on the make of the machine and the distance of your trip, other items may be added to the list.

PROTECTIVE CLOTHING

Like motorcycles, snowmobiles offer the rider little protection. It's easy to hit a concealed obstruction, fall into a hidden crevasse, suffer frostbite from exposure, or just plain get lost. The right clothing and equipment can mean your survival and are part of the cost of snowmobiling.

One- or two-piece snowmobile suits with water-resistant covering and lightweight, high-insulating linings should be worn by all riders. The layers of clothing worn underneath can vary with the temperature. Approved helmets are recommended at all times. They provide warmth as well as head protection.

A stocking cap and face mask should be carried or worn. Goggles, or a face shield which attaches to the helmet, are absolutely necessary. Gray or dark green lenses are for bright days. Dark days or late afternoon sun call for amber or yellow lenses. These are also useful for driving under flat light conditions because they can reveal dangerous depressions in the snow. Naturally, you won't wear colored lenses at night.

Hands should be protected by snowmobile gloves or mitts that have insulation and permit use of your thumbs and fingers to operate the controls. Rubber-bottom boots with either a

continued

nylon or a leather top with removable felt liners are best because they keep feet warm and dry while providing traction. Avoid wearing scarves or loose clothing that could be drawn into the moving parts of the vehicle.

Always check the weather forecast and refer to a wind chill chart before you start out. Dress for the coldest weather expected and consider the length of your exposure.

RIDING TECHNIQUE

The basic operation of the snowmobile is simple. A hand-operated throttle is spring-loaded to the off or

(below)
The Snowmobile literally floats over the snow because it lays down sufficient track area to support the vehicle. Track must be checked frequently for damage and wear. The snowmobile will not move if the track is blocked with frozen slush or other foreign material.

Photo courtesy Hank Taylor, Alaskan Air Command

closed position, and a hand-operated brake stops the machine. The width of the track and the skiis will support you adequately for riding on a straight, smooth surface. When climbing hills or going on trails with bumps and curves, you assist the machine by leaning your body weight left, right, forward, or back to maintain balance and track contact with the snow. A lot of people compare it to riding a bicycle.

Experience teaches you how much lean to put into turns at different speeds, and how much you will have to lean into a slope to maintain balance. Track contact is all-important because the track's turning action provides the forward thrust for the machine. If the snowmobile is banked too much, the track will lose contact with the surface.

The riding position for best balance and control is usually sitting, but other positions are used under certain conditions. When sitting, the legs should not be fully extended under the hood. Knees and hips should remain flexible so that on rough terrain, the knees absorb the shock instead of the kidneys or back. A semi-sitting position with the body off the seat and the feet under the body in a sort of squatting posture (posting) allows the legs to take shocks instead of the body. Newer snowmobiles have bucket seats for sitting in, not on, and shock absorbers for smoother rides. (Did we hear a snicker?)

WHERE WILL YOU RIDE?

Unlike a car that travels on a definite road, snowmobiles can get into areas other vehicles can't traverse. Operators are tempted to put their vehicles into places and situations which are dangerous. Know your vehicle and its capabilities. A snowmobile is a versatile vehicle but that doesn't mean it is without limitations.

On a maintained trail, sitting is the preferred riding position. Don't race there and, above all, keep to the right. Collisions with other snowmobiles are a common kind of accident. Observe the trail signs and don't zig-zag from side to side as you would in open country. Learn and use hand signals.

Unless there has been fresh snowfall, you can expect washboard and snowdrift conditions on an ungroomed trail.

continued

The correct fuel mixture is very important. Too much oil in the gasoline can foul the plugs and engine, too little can cause seizure. Keep away from an idling machine when mixing fuel, never add fuel when engine is operating.

Photo courtesy Hank Taylor, Alaskan Air Command

Gear for snowmobiling can be expensive but is necessary part of the cost of the sport. Helmet not only provides head protection but gives additional warmth over stocking cap.

Photo courtesy Hank Taylor, Alaskan Air Command

Best riding conditions are on six to 12 inches of snow. Deep, fresh snow is a test of skill and balance—too much weight on either side and the track's edge can dig in.

Photo courtesy Hank Taylor, Alaskan Air Command

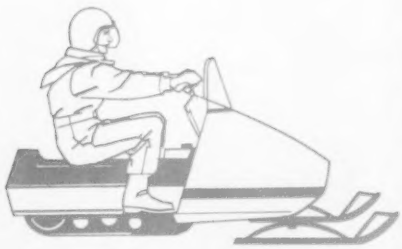
Proper sitting position: Knees and hips flexible to absorb shock of rough terrain or washboarded snow.

Photo courtesy Hank Taylor, Alaskan Air Command

(right)
Snowmobiles are like boats—they have to be taken to the fun area under some other power than their own. Trailers can be very elaborate: fully enclosed, big enough for two machines, and a lot of gear. But simple rigs work fine.

Photo courtesy Hank Taylor, Alaskan Air Command

RIDING POSITIONS



SITTING

Taken at speed, these can do you real physical harm. Hold on to the handlebar and assume the posting position.

In deep powder snow, the snowmobile can begin to bog down. If this occurs, turn as wide an arc as possible and look for a firmer base. If you do get bogged, and it happens to everyone, don't spin your track. This sinks you deeper. Instead, turn the engine off, get off and move the vehicle rear onto new snow. Then tramp a clear path ahead – a few feet is generally enough. Restart the engine. Assume the standing position and rock the sled gently as you steadily and slowly apply throttle. Don't place foreign material beneath the track for support.

Never ride on frozen lakes or streams unless you're *positive* the ice is strong enough and there's a snow cover. Icy surfaces can be as dangerous to the snowmobiler as to the motorist. Don't underestimate hard-packed snow either. It can be difficult to negotiate since both skiis and track don't have as much traction. Beginners should strictly avoid side hills and steep slopes, regardless of ice.

THE BUDDY SYSTEM

Experienced snowmobile jocks know better than to go off alone. They use the buddy system. It's more fun and it's safer for two people to be out with two machines. Snowmobiles do break down, and at sub-zero temps the simplest maintenance takes a lot of physical effort. Your buddy will be a big help, can even tow you in if necessary. But the biggest reason for the buddy system is that if a rider is seriously injured, he won't be alone, perhaps unconscious, in the cold.

If it's foolish to go off alone in daylight, it's plain suicide at night. Snowmobiling at night can be a real thrill if done properly. Don't go without a good strong light and some flares. Hazards that are hard enough to see in daylight really lose themselves in the darkness . . . until you hit them! Don't overdrive your headlights. Keep speeds down and stick to territory you and your buddy know.

POSTING

KNEELING

MAINTENANCE

Your snowmobile needs regular, correct maintenance. Give it a thorough check periodically and a general check before each ride. The vehicle operates in the harshest wather and terrain and deserves scheduled care. Be fussy about lubrication; check for loose, worn, or misaligned components. Assure yourself that the carburetor and throttle linkages are set correctly. Periodically clean and adjust spark plugs and set the gaps. Don't operate the machine unless the hood and guards are in place and firmly attached.

MORE INFO

If you're seriously considering snowmobiling, you'll want a lot more information than we can give you here. The ideal way to learn a lot is to join a club. There are many good publications available, too. A new one is "Snowmobiler's Safety Handbook." It's available from Snowmobile Safety and Certification Committee, Inc., Suite 312, 1755 South Jefferson Davis Highway, Arlington, Virginia 22202 and costs 12¢ each.

HITCHHIKER

—TO BE OR NOT TO BE

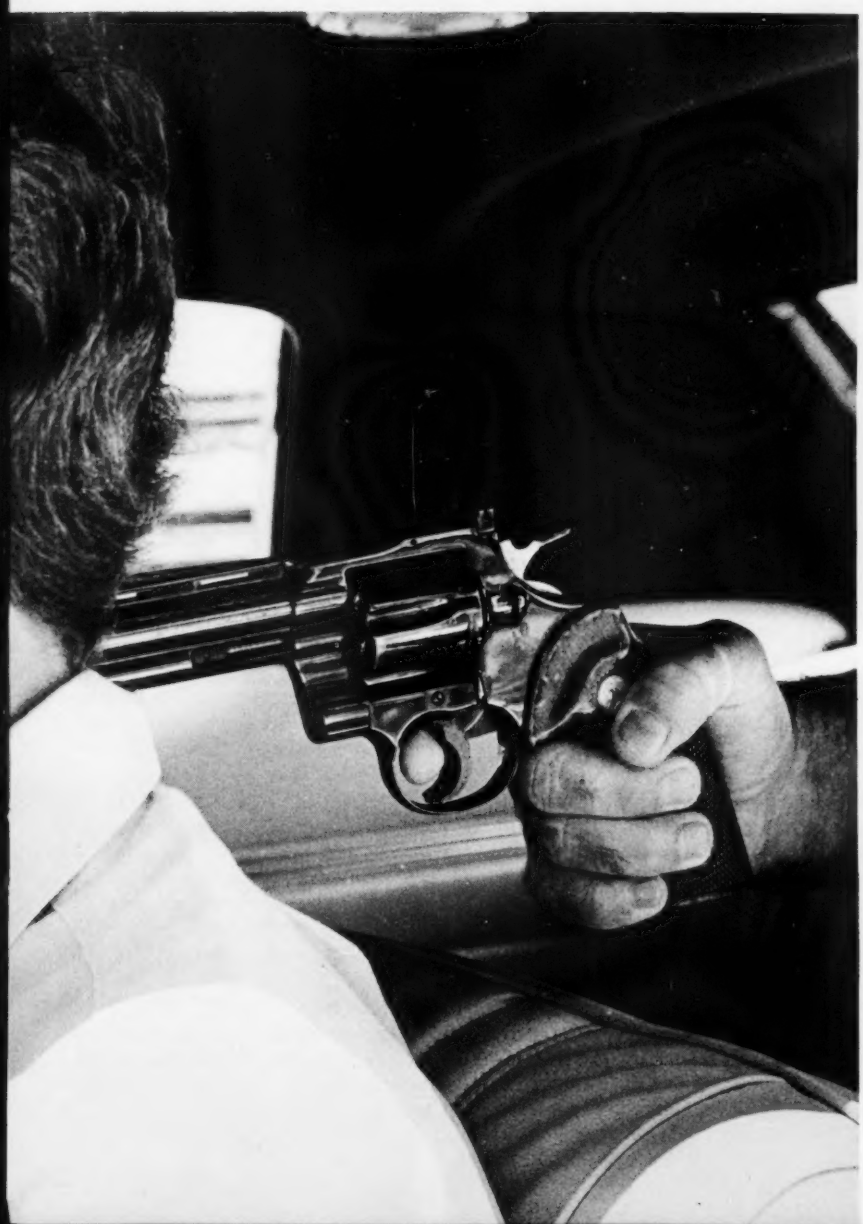
There's no rule of thumb for soliciting or giving free rides —just do it intelligently, legally, safely

(right)
It's just as important for the driver as it is for the hitcher to know who he's riding with. The two major crimes committed by hitchhikers are robbery and car theft; however, a California study shows a thumber is three times more likely to be the victim than the perpetrator of a crime.

Let's set the record straight – DRIVER does not recommend hitchhiking except in true emergencies, like when your car breaks down and you're stranded. But we recognize the fact that hitching is like drinking – people are going to do it regardless of its potential dangers and some are going to get into trouble doing it. So . . . we simply say, if you're going to hitch, do it intelligently . . . do it legally . . . do it safely. And the same advice applies to drivers: Don't pick up thumbers but, if you do, do it intelligently, etc.

Sermon's over. Let's get down to hitching.

(left)
On-ramps to limited access highways are favorite hitching locations in most states.



To start with, the really super way to travel long distances is space-A. However, we're going to assume free military airlift is unavailable, and you're short on bread for plane, train, or bus fare, regardless of the length of your trip.

MORE RIDES IN '76

Hitching rides should be better than ever in 1976. Bicentennial events in major cities across the nation will develop extra traffic and longer rides, but crowded cities also run up survival costs and make hitching hazardous at best.

Hitchers are a trendy group. Every year some spot or scene is grapevined as the place to be, usually resulting in some crowds and chaos. Rock festivals are always big, but some wind up in riots and rip-offs.

Historic Washington, D.C. will be action central in the USA in '76, while the World Olympics will attract millions to Montreal in late summer. All of which means these and other tourist meccas probably will be good places to avoid.

Although more hitchers are out on Saturdays and Sundays, weekends and national holidays are lousy for snaring rides. Roads are usually filled but so are the cars. Weekend vacationers normally don't give a frap about taking on riders.

In spite of this fact, more hitch-hiker-related traffic accidents also occur on Saturdays and Sundays than any other days of the week. And Sunday morning from midnight to 6 a.m., the period when more boozed-up drivers are on the loose, is the most dangerous hitching time.

IF YOU GO, GO LIGHT

Probably the two most important words to thumbing are, "Travel light." It's not only easier, it's safer. If you've just arrived Stateside saddled with a big A-3 duffel and/or a bulky B-4 flight bag, strip to necessities. Ship 'em separately if possible. Limit yourself to one or two pieces of light luggage like a carry-on flight bag.

For planned trips, experienced hitchers prefer some kind of camping bag like a backpack or backduffel. These

continued

(left, below)
Many hitchers will argue over whether it's best to be first or last in line for ride-catching success. These two cross-country travelers (left) were up front when a driver (below) stopped for them at a freeway entrance. He could have received a traffic citation, however, for stopping in a traffic lane and on a curve as well.

(below)
Fort Hood, ho! These two Texas soldiers, tired of standing, try their luck at sitting with a sign which tells motorists they need a lift to their base 1,200 miles away. In some states, laws prohibit thumbers from soliciting rides while occupying paved surfaces of the roadway as this pair is doing. Five states outlaw hitching altogether.

are easier to carry (especially over long distances), less fragile, less likely to be stolen, and set you apart from the common *touristas*. With a pack on your back, you're not a tourist but a traveler.

The two most popular backpacks are the metal-frame, water-repellent variety with lots of zippered or Velcro-patched compartments and the softer, looser, leather strap and canvas jobs. There are good points for both kinds. Seek advice from some seasoned hitchers – but bear in mind that living standards vary greatly among hitchhikers.

Don't forget some rain gear. A lightweight yellow poncho or plastic raincoat, even some roll-up plastic rainboots, will keep you dry when you're roadside in a downpour.

STATE HITCHING LAWS VARY

Hitchhiking is legal in most foreign countries, but laws governing the practice in the states are confusing at best. Six states have statutes outlawing hitching (raising your thumb or sign or otherwise "soliciting" a ride), seven more take a permissive attitude, 15 have less than clear definitions of where to stand if you do decide to hitch, while the remaining 22 say hitching is OK so long as you don't stand on the pavement of the roadway but wait on the shoulder or on a nonpaved area out of the flow of traffic.

As a *New York Times* punster recently penned, "there's no rule of thumb" for hitching in the USA. But here are DRIVER's words of wisdom for all 50 states as of the end of '75:

Don't do it! – Hawaii, Maine, Nevada, New Jersey, North Dakota, and Wyoming.

Hitching's permitted, just be careful – Michigan, Mississippi, Missouri, New Hampshire, South Dakota, Vermont, and Washington.

It's OK but check with local police first on their definitions of "roadway" and "shoulder." – Alaska, Arkansas, Colorado, Georgia, Indiana, Iowa, Kentucky, Massachusetts, Minnesota, North Carolina, Oklahoma, Oregon, Pennsylvania, Virginia, and Wisconsin.

You're generally legal so long as you stay off the roadway and out of traffic. – Alabama, Arizona, California, Connecticut, Delaware, Florida, Idaho, Illinois, Kansas, Maryland, Montana, Nebraska, New Mexico, New York, Ohio, Louisiana, Rhode Island, South Carolina, Tennessee, Texas, Utah, and West Virginia.

HITCHING TIPS

1. Chances for rides are infinitely better if you're in uniform and neat appearing. The average American is proud of men and women in the Armed Services and, conditions permitting, will stop for a sharp looking military person.

2. Don't forget, if you ARE in uniform, motorists will be judging your branch of the service by your actions and language.

3. Since most motorists usually stop ahead of you, don't dilly-dally. Pick up your gear and run to the car.

4. Generally speaking, don't accept a ride if the driver is going to drop you off in a rural area or at a location where traffic has no reason to slow down. Politely tell him why you must decline. Do, however, accept a short ride to a better hitching site.

5. Don't go far without one or more good maps of your route, including one showing on- and off-ramps to limited access highways in larger cities. Knowing your exact location can save hours of time and miles of walking, especially if your driver drops you at a remote spot or you sleep through your drop-off point.

6. Go to a good cycle or speed shop and buy yourself a super-lightweight vest or jacket (preferably reversible) in fluorescent yellow-orange or red-orange for daylight use and/or reflectorized white or yellow for night use. It not only will attract rides, it'll help to keep you alive.

7. If you don't have light colored garments, or are in uniform, stick some reflectorized tape across the back of your pack or luggage and position it toward traffic.

8. Day or night, stand so the light will strike your face and body. No driver likes to pick up someone he can't see or relate to.

continued

DON'T GET YOURSELF BUSTED

It's estimated that nearly 1% of all *hitching trips* in California (over 10 million a year) result in arrests and fines for illegal hitchhiking. Traffic cops ticket over 100,000 men and women annually, mostly for soliciting rides on freeways or for soliciting while standing in roadways. That's a lot of bread to give away needlessly.

In all but five states it is illegal to walk on limited access roads, regardless of whether hitchhiking is permitted on secondary roads. If you can't walk on them, you sure can't hitch on them. Outlawed are freeways, turnpikes, thruways, and the like. This is why there's always a big lineup of thumbers at the entrances to on-ramps and access roads.

The five states allowing pedestrians on limited access roads are Arkansas, Kentucky, Missouri, North Carolina, and South Carolina. You may be required to walk on the left side facing traffic, however, thereby making hitching next to impossible – not to mention hazardous as hell!

The likelihood of getting busted often depends on the attitudes of local police, prosecutors, and judges. Bear in mind that you not only can be arrested but the driver who picks you up can also be cited and generally is. Most hitchers will tell you, however, that thumbers who get pinched usually ask for it by their arrogant actions, slovenly looks, and abusive language.

DON'T BE A KLUTZ!

Too many hitchers pay little or no attention to accident prevention, other than the fact they don't want to get run over.

Even fewer worry about making conditions safer for motorists. Resolve right now that before you ever hit the road, you're going to mentally put yourself behind the steering wheel of every car or truck or cycle coming toward you, regardless of direction. Visualize how you look to those drivers:

- Can they even see you? Do you stand out or blend with the background?
- How soon can they see you? Soon enough to stop safely if they want to give you a lift?
- The spot where you're standing – is it on a curve or narrow lane or just over the top of a hill or rise or other hazardous location? If so, move!
- Is traffic too heavy for a driver even to risk stopping?
- Is the sun setting behind you or are there other bright lights or reflections that may blind drivers approaching you?
- Is the lettering on your destination sign large enough and the background contrasty enough for motorists to read easily without endangering themselves (and you)?
- Are you standing far enough beyond an intersection for a motorist to avoid a rear-ender from a trailing or turning vehicle?
- Are you located where a motorist can safely pull off the road and out of the line of traffic to pick you up . . . then safely reenter the traffic flow?

If you can answer "Yes" to each of these questions, you're in pretty good shape. But some extra words of caution:

USE ON- AND OFF-RAMPS WISELY

DON'T ever let your driver dump you on a super highway, especially at an interchange. Politely ask him to please exit at an off-ramp first, then he can resume his trip via a nearby on-ramp. This may well prevent a serious accident and/or save both of you the price of a traffic ticket.

Conversely, if you're the friendly driver, don't let some turkey talk you into dropping him off until you completely exit the highway.

This situation is precisely why you should have a detailed map showing on- and off-ramps. Try to get off one or two exits ahead of an interchange. If you forget, continue on to a safe exiting point, then get out your destination sign and start thumbing your way back.

Some hitchers like to travel at night when there's less competition for rides, although we don't recommend it. If you do hitchhike at night, wear light colored clothing. Stick to stopping points for traffic or to straight stretches of road where motorists can see you in their headlights, or stand under a reflective sign. Better yet, it's usually safer to hang around a service station or truck stop and bum a ride face-to-face.

continued

continued

HITCHHIKER

If you're stranded in the inner city, don't hesitate to spend two bits or so for a bus, tram, or subway ride to a good hitching location in the suburbs or out of town. While some thumbers tend to be fanatical purists about spending money, this small "extravagance" can save you several hours and several miles of hazardous plodding in heavy traffic.

Don't be afraid to shake hands with your driver or rider – a smile and a handshake are still the best tools for breaking the conversation ice with a stranger.

YES, VIRGINIA, IT IS DANGEROUS!

The big dangers of hitching have to be getting robbed, kidnaped, raped, mugged, or otherwise assaulted and causing or being involved in a traffic accident. However, contrary to what a lot of people say and think, one study concluded that hitchers make only "minor contributions to these problems." But get this: A hitcher is three times more likely to be the victim than the perpetrator of a major crime.

Although only one hitcher in 10 was female, one-half of the victims in the California Highway Patrol study were women, most of whom were raped. The typical male victim was robbed or assaulted by the person(s) giving him a ride. Three hitchers were killed. And most crimes involved a lone suspect in a vehicle against a single 19-to-23-year-old victim soliciting a ride.

Thirty percent of the traffic accidents involving hitchers resulted when a vehicle was stopping to pick up a rider or starting after letting him out. Another 20% involved a hitcher being struck by a car which was not stopping for him.

PICK YOUR DRIVERS CAREFULLY

The Highway Patrol reported that almost half of the hitchhikers were only passengers in vehicles involved in traffic accidents and could not be blamed for them.

None of this information should be considered an endorsement for hitchhiking. Remember, once you've climbed inside a stranger's vehicle, you're especially vulnerable and you've restricted your chances to escape or call for help. A few words about picking your ride might therefore be in order.

Always approach a vehicle from the side nearest the curb or roadside (you don't want to get the driver uptight or get yourself clobbered by a passing car). Mention where you're going and inquire politely if he has room for an extra passenger. Make sure he's not drunk or stoned – decline his offer if he is or seems weird. If you accept a ride and your driver is obviously dangerous, ask to be let off immediately. Don't worry about hurting his feelings – your life's at stake.

DRIVER finds that hitchhiker-related crimes and traffic accidents are like airplane crashes. They grab the headlines. In hitching's case, this may be a good thing if the publicity prevents an accident, rape, robbery, or kidnaping, or saves a life – maybe yours.

(DRIVER appreciates the assistance of the California Highway Patrol and Jeff Kennedy and David E. Greenberg, authors of The Hitchhiker's Road Book.)

TIPS, Cont'd

9. Carry a good flashlight, maybe extra batteries, and use it from dusk to dawn to show motorists where you are.

10. Take along a few first aid items, including insect repellent for those skeeter and chigger infested drainage ditches paralleling many highways, as well as for gnats. Also, carry a roll of toilet tissue, crushed flat to conserve space.

11. Always carry some form of legal identification like a driver's license, military ID card, birth certificate, etc. Next to illegal hitching, lack of ID is the primary reason hikers are arrested in the USA.

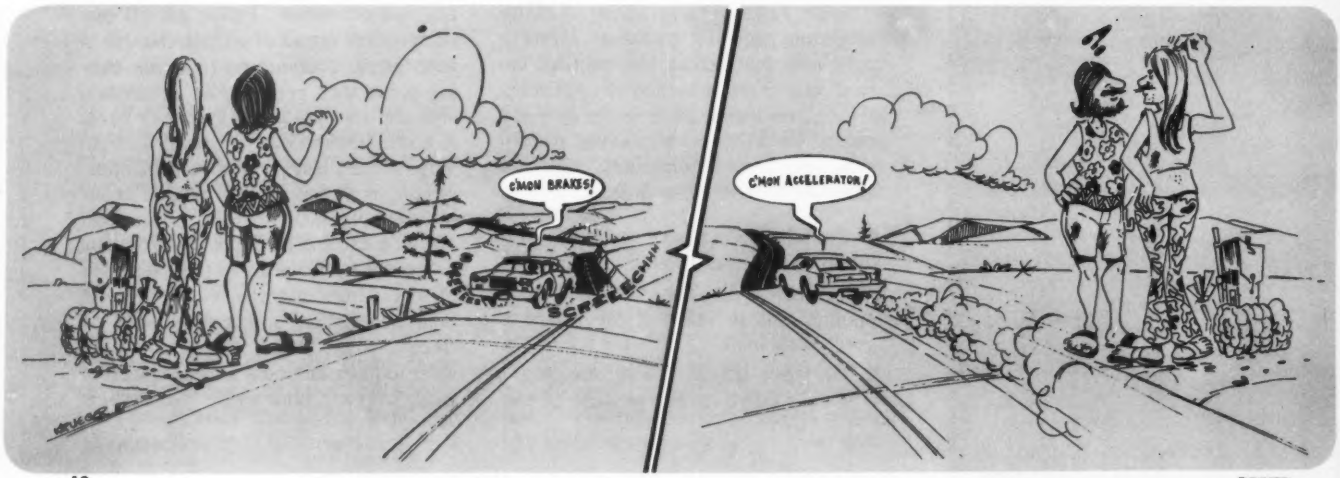
12. Carry the name, address, phone number, and relationship to you of a family member or friend to be notified in case of a serious accident. Police say it can save your life.

13. Try to stash at least a fiver in your shoe or some secret spot on your person. Not only will it be handy for food in a pinch, it also will keep you from being arrested and possibly jailed for vagrancy in some states and cities.

14. Another Wall Street gem: Always keep a dime handy for an emergency telephone call. Most pay phones are useless without a dime or two nickles, not to mention pay toilets.

15. Smokers: Don't light up unless you first ask the driver for permission to smoke, then graciously respect his wishes if he says "No."

16. Ditto for eating in the car unless the driver says "OK."



MISS DRIVER

REBECCA M. HALBROOK

"It's amazing how much crud accumulates on car glass, particularly on the INSIDE of the windshield. A friend told me about a driver who barely missed two pedestrians one night because the scum on the inside of the windshield blocked the driver's vision. This film is especially bad in the winter and in cars where there are smokers. One problem is that gas station attendants only take care of the outside of the windshield. This is why I regularly use a window cleaner with ammonia on BOTH the outside and the inside of my car's windows, and clean the mirrors too."

(Photo by Capt Tom Rathmell, Mo. ANG)

You can ride in the rain without meeting your maker if you simply exercise a little caution and pre-planning. Motorcycle safety educator Carnahan tells how

by
DON M. CARNAHAN

ROLLING in the RAIN

If you're of the opinion that the only way to assure motorcycle safety in the rain is to leave your machine in the garage when the clouds start to gather, then you probably ought to consider staying in your house at all times in deference to the possibility of being done in by a herd of rampaging aardvarks.

Granted, you should never ride when conditions are such that you have no confidence, but if you live in the Pacific Northwest and subscribe to the above philosophy about rain and riding therein, your scooter is going to be in the garage about 300 days out of every year.

There is no question about the reduced amount of traction and potential loss of control of a motorcycle on wet pavement compared to the dry stuff; many riders have laid it down on wet pavement while performing routine maneuvers. However, a motorcycle can be operated safely on wet pavement if the rider will make some important adjustments in his riding style and interactions with other traffic.

Before we get into these rider adjustments, first of all consider what rain wear to carry on your bike at all times, just in case you should get trapped in an unexpected shower (the weather guys do make mistakes).

Lightweight gear may be all you need in some areas. Lightweight vinyl two-piece rain suits are inexpensive and very compact. They can be carried on your bike so they are out of sight and out of the way. There are several brands of rubberized nylon one- and two-piece rain suits on the market which also fold into a compact package. The rubberized nylon is more durable, but it is also more expensive, so you'll have to let your wallet steer you. Don't use military issue raincoats, though . . . the price may be right but they're very long and may catch in the chain or rear spokes.

Nylon, vinyl, and leather gloves with a foam lining will provide the greatest warmth while wet. The gauntlet type is preferred to keep the wind from blowing water up your sleeves. The vinyl or nylon gloves are actually more water resistant and will usually keep your fingers dryer and warmer than the leather ones.

Most of us don't wear rubber boots all the time when we ride, and keeping your feet dry during one of these unanticipated rain storms can be a problem. Rubber boots are bulky even in the smallest sizes and do not bend very well which makes it hard to pack and carry them on a bike. Even if you have a set of saddle bags, you probably don't want to carry a pair of rubber boots around.

A simple way to keep your feet dry is to carry three or four folded plastic bags of the right size to slip over your leather boots. If you carry a couple of wide rubber bands to secure them, you will be able to keep your feet dry during all but the heaviest downpours as long as you don't poke a hole in the bag while shifting or braking.

continued

When the road looks like this, watch out!

Look around for the proper-sized bags. Heavy-duty kitchen garbage pail liners and some dirty clothing plastic bags are about the right size. They can't be too big, though, as the wind will almost certainly tear them off. If you tuck the plastic bags up under the cuff of your rain pants, and then put the rubber band over the pant leg, you should stay dry for many miles.

The best eye and face protection is provided by a flat, full face shield. At 55 mph raindrops can really hamburger your face. The need to protect your eyes is obvious and goggles will do this quite well if you opt for them instead of a face shield.

If you use a face shield and are riding in the rain in stop and go traffic, the shield should be of the flip-up type. Stopping in traffic can steam up the whole thing in a couple of seconds. You may wish to try some of the anti-fog chemicals on a regular face shield that does not flip up, but so far my experience has shown these to be ineffective under all conditions over extended periods of time.

How about when it's raining before you leave home, and you know darn well it will be raining when you are riding back? The protective clothing (in this case, rain gear) should be different. Your clothing should be as waterproof as possible. Rubber boots and rubberized pants and jacket will be the uniform of the day.

There are a variety of options in either one or two-piece rain suits designed especially for motorcycle riders. These are extremely effective and much warmer than those previously described for carrying on your machine at all times for unexpected showers. These suits are also more expensive and may run in the $50 to $80 price range. If you plan to ride in the rain, it is worth the investment to stay dry and warm, especially if you have to buck the storms on a regular basis.

In torrential downpours and cloudbursts, your best bet is to park and wait it out. And, if you are getting ready to leave home while it is raining hard, it might be best to use another mode of transportation.

Having tricked ourselves out appropriately for the ordeal, let's consider actual riding conditions. The first point to consider about the rain is, "How long has it been going on?" The first few minutes of the storm, especially after a long dry spell, are the worst and the time when the road surface is most treacherous. So remember to cool it for the first few minutes after it starts

to come down.

After it has been raining for a while, the oil will have been washed from the road surface and the going will not be quite so slippery. But even after it has rained for quite some time, traction conditions will still be less than ideal so remember to SLOW DOWN and allow more room for your following distance. Here are a few hints that should help you do a better job of riding in the rain.

RIDE THE HIGH SPOTS – As you look down your lane of travel you will notice high spots or parts of your lane that seem to be dryer than others; use them to your advantage. In some cases, this dry spot will be in the center of your lane. Studded tires and a lot of traffic will often wear away the road surface and you will find puddles of water in these low places. Avoid these puddles by riding on the high spots of your lane.

FOLLOW THE TIRE TRACK OF THE CAR IN FRONT OF YOU – When the road surface is relatively flat, the driest portion of your lane may very well be in the tire track of the car you are following. The car tire forces the water out of your path and you can stay dryer by riding in this dry spot. But remember to stay back; following distance should be increased when the road is wet.

MOVE AS FAR AWAY AS POSSIBLE FROM LARGE TRUCKS – When the 18-wheelers hit puddles, they can nearly drown you out. The splashed water from a large truck can blind you for a short period of time and without windshield wipers, cleaning a face shield can create quite a problem. Also, an extra large truck hitting an extra large puddle can knock you right off your scoot.

CHANGE DIRECTION AND SPEED GRADUALLY – Since traction is reduced, your ability to make quick changes in speed and direction also is greatly diminished. If you blow it, you go down so quickly that you rarely have an opportunity to recover. This is especially true when crossing bridge gratings or any other slippery riding surface like railroad tracks. Look for signs warning that the road surface is slippery when wet.

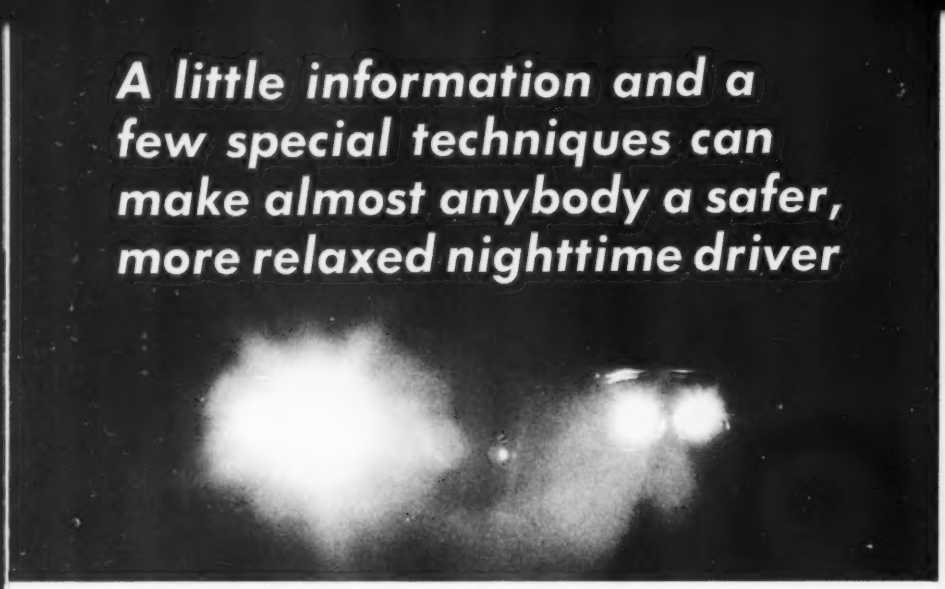
BEWARE OF PAINTED LINES AT CITY INTERSECTIONS – These are especially bad when making turns. If you slow down and try to make your turns with as little lean as possible, you will decrease the possibility of a fall.

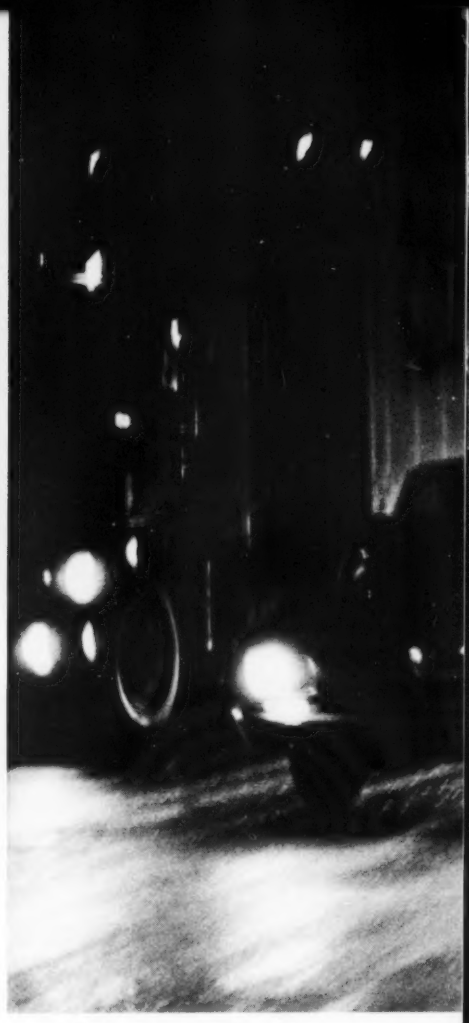
BE ALERT FOR OIL ACCUMULATION – This is really a problem at busy city intersections especially right after it begins to rain.

These are by no means the only things to be concerned about when riding in the rain. However, these points concern rider adjustment that can keep you and your scooter on the road when the "sunshine soldiers" have packed it in.

(Reprinted courtesy AMA NEWS, American Motorcycle Association)

A little information and a few special techniques can make almost anybody a safer, more relaxed nighttime driver





You probably know at least a couple of people who are uncomfortable at the wheel after dark. They may be perfectly confident and coordinated in daylight, but you found out long ago that their first question about a planned trip out of town is "What time will we be back?" If the return time is much after sundown, you know you'll be doing the driving.

People are often embarrassed about their fear of driving at night and they spend a lot of time making excuses. That's too bad because, unless they have a vision problem, they can easily become better after-dark drivers.

Most of us learned to drive in high school, but few high school driving instructors have the time (or the courage?) to ride with their students after dark. So by the time we get our first licenses, most of us have had no special instruction in nighttime driving and aren't likely to get any. Yet young adults – particularly men – want to do most of their driving at night. And night driving *is* different.

Now, with winter's long hours of darkness upon us, is a good time to talk about it. Even if you are already a good nighttime driver, you might pick up a few new ideas.

After-dark driving is different for the simple reason that there's a lack of light to see by. The best headlights and street lamps can't compare to the light of day. Since your headlights often are all the light you have at night, be sure they're doing the maximum for you. The battery must be fully charged because the light output is greatly reduced if the battery is down.

Be sure your lights are aimed properly, too. They should reveal objects at least 350 feet away; that's more than the length of a football field. Clean the lamp lenses regularly and clean your windshield frequently, inside as well as out.

PLAN YOUR "LOOKING"

When meeting oncoming traffic, avoid looking directly at the approaching headlights. Instead, watch the right edge of the road or of your lane as far ahead as possible. This also helps you spot pedestrians, who are *supposed* to wear light-reflective clothing and carry flashlights but who usually just operate on faith that you can see them.

Learn to use edge painting, lane lines and center lines on regular roads, and reflective "rumble strips" on freeways. They will help you to stay in your own lane and to change lanes for passing.

On the open highway, look ahead as far as the headlights allow. There's a natural tendency at night to focus just a few feet ahead. Pilots do the same thing when flying at night. If you find you are "looking short," make a conscious effort to focus farther ahead. Eventually it will become a habit.

AVOID BRIGHT LIGHT

Protect the dark adaptation of your eyes. Remember that the flash of a match or cigarette lighter, the briefest glow of the dome light, can temporarily blind you. Experiment with the level of your dash lighting. Don't keep it so bright that your eyes must adjust every time you glance at the speedometer. If you take a short coffee break at a cafe, wear sunglasses inside. It takes your eyes up to 20 minutes to readjust to night driving conditions, and sunglasses worn inside brightly lit areas can shorten the recovery time drastically. Adjust your rearview mirror to the night position. If your mirror doesn't adjust, take care not to stare into it at reflected lights from behind.

Learn the position of all the control knobs and levers in your car *by touch* so that you don't have to look to be sure the windshield washer button isn't the light switch. If you have an automatic transmission, know how to put the selector where you want it without looking.

Different road surfaces present different glare and light-absorbent

DRIVING AFTER DARK

qualities. It's usually easier to see ahead on concrete, for instance, than on asphalt. When the road surface changes, lower your speed while you check visibility.

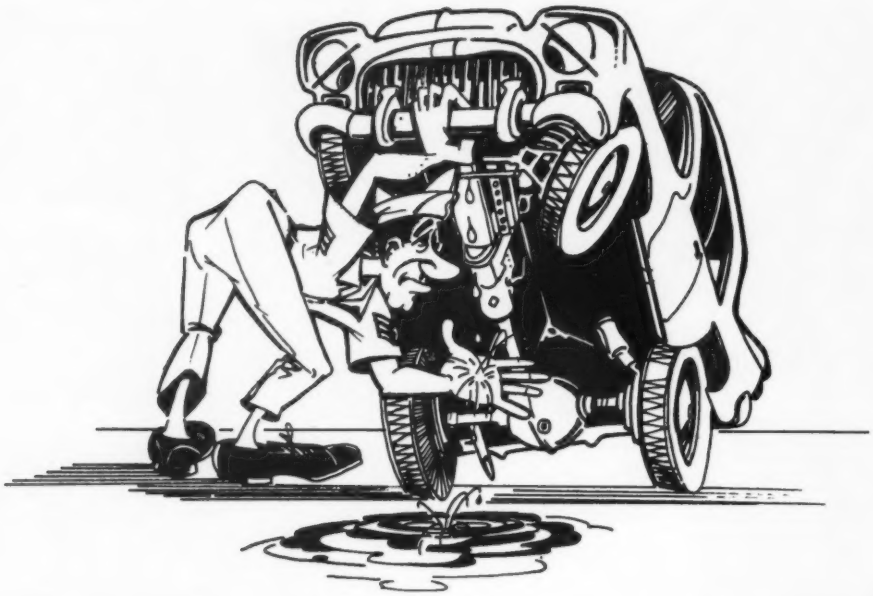
Also slow down when leaving a brightly lighted area. It takes time for your eyes to adjust to the darkness again. On hills and curves your headlights may be shining into space instead of on the road. Slow down here, too, so you can stop in the visible distance ahead. "Don't overdrive your lights" is a good old rule.

SOCIAL DRIVERS

When we drive at night we can expect to encounter a different type of motorist than we do during the day. People go to work, to shop, to school in the daytime and are "necessary" drivers. The "social" driver who is on the road at night is frequently the drinking driver. Be defensive at night. That means you should increase following distances and slow down more gradually when stopping to give the cars behind you more time to react. Do everything you can to help other drivers: flash your headlights as a sign that you plan to pass; lower beams within 500 feet of oncoming cars and about 300 feet before overtaking cars ahead; flash your brake lights to warn a following driver of unexpected stops.

Believe it or not, there are a couple of safety advantages to driving at night. Approaching traffic can be "seen" over hills and around curves because of headlight reflection. And the night driver is not so likely to be distracted by activity off the road that may be interesting but is unrelated to the highway.

With practice, the night driver can establish good habits that will build confidence so that eventually he may actually enjoy being at the wheel after dark.



WATER PUMP R&R

Porsche and V-Dub owners please disregard this article

If you keep a new car long enough, or buy an older car at just the wrong time, chances are you'll have to replace the water pump at least once. Installation costs run from $20 to $50, depending on year, make, model, etc. If you can invest a little time and skin a few knuckles, you can save this installation fee by being a Backyard Mechanic. Granted, it's a dirty job, but what's the cost of hand cleaner anyway?

As in all jobs, get your tools and tech data together before you start. If at all possible, though, don't buy your parts first. If you can remove the old water pump and take it to the parts store you'll be able to compare it with the new or rebuilt one that the parts man gives you. At that time, you'll also be able to see if the old fan pulley and hub will fit on the new pump – they often don't. Check the new pump gasket for fit, too. The parts man will also recommend the correct gasket sealer or cement for your particular installation.

REMOVAL

The big item here is to keep all the nuts and bolts you remove in an identified container. Water pump and engine accessory bolts are often the same diameter but have different lengths. Trying to start a short bolt in a deep hole can be *slightly* frustrating.

OK, on the bottom of the radiator and facing the engine is a "T" shaped petcock. Turn it and you'll drain the radiator. If you haven't let the engine cool sufficiently, you'll also burn yourself . . . watch out. Removing the radiator cap will let the radiator and engine block drain more quickly. Observe the color of the water as it goes into the drain pan which you have so cleverly placed underneath the car. If it's super rusty, it may mean that you need the radiator flushed (see June '73 DRIVER).

While the water is draining, remove

continued

(above)
When you open the radiator petcock to drain the cooling system, use a catch pan. Old radiator water does bad things to concrete.

(right)
Remove radiator attaching bolts and panels. Fan shroud should be loosened, too.

any shrouds or panels that will prevent you from gaining good access. The fan shroud probably cannot be removed at this point, but remove the bolts for later.

After the water has drained, begin removing the water hoses that connect to the water pump. Start with the uppermost hose. When you remove the large lower hose, be ready for a good-sized splash from water trapped there.

Loosen the alternator, power steering, air conditioning, and air pump (smog device on some cars), and remove the drive belts. Lay them out in order or mark them so you know which belt goes where. This step may be necessary before you can get at that lower hose we mentioned earlier.

Unbolt and remove the fan. The fan and the fan shroud will probably come out simultaneously. Removing the fan is where you may skin some knuckles against the radiator, so use an open-end wrench and lots of care. If you can't move the fan forward enough to get it off the pump shaft, you'll have to remove the radiator.

You should now be able to get at the water pump. Again, be careful when you remove the pump bolts . . . 9 out of 10 times the bolts will be of different lengths.

Most of the time you'll remove all the pump bolts and the water pump will come out easily. "What if it doesn't?" you ask. Well, obviously, it'll have to be coaxed a little. You may be heading for trouble if your first move is for a screwdriver. Stifle that impulse to get in there and pry away. A plastic hammer and some light taps here and there on the pump will do the job.

After the pump is in your hands and before you trundle down to the parts store, get out your putty knife and scrape away all the old gasket material and grease from the machined surfaces of the engine block at the pump mounting points.

At the parts counter, double check the old pump against the new one. Parts people make mistakes occasionally. Check to see that your old hub and fan pulley fit on the new pump.

INSTALLATION

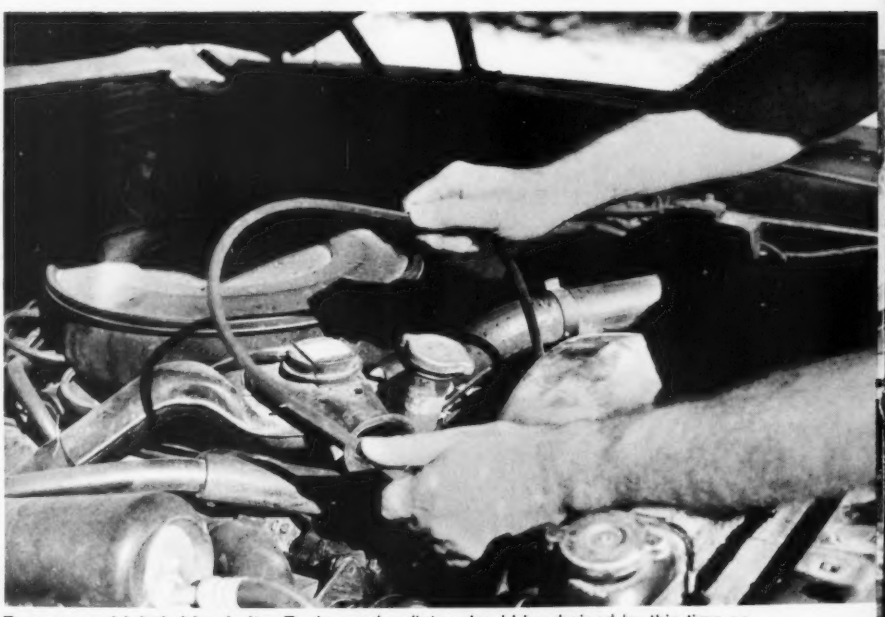
Back at the ranch, check the new pump against the block. Look for warped pump surfaces, mismatched water ports and bolt holes, etc.

Apply the gasket goop as per directions. Some brands you apply to all surfaces, some to only one side of the gasket; there are many variations. Be sure to read the label.

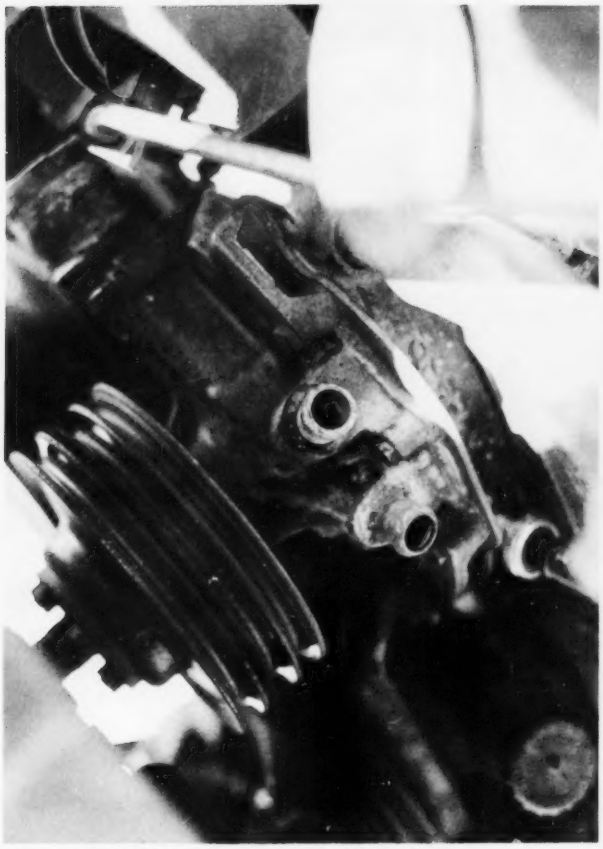
Stick the two longest bolts through the correct holes in the pump and hang the gasket on them. Put the pump against the block and start the two bolts. Insert the rest of the bolts before you tighten any of them. This will insure proper alignment of the gasket. Using your motor manual and your trusty torque wrench, tighten the bolts in a star pat-

continued

Loosening engine accessories can be a real bear. Power steering pumps on most GM products pivot on bolts found between the pulley and the pump face.



Remove and label drive belts. Engine and radiator should be drained by this time so . . .



Remove all water hoses connected to the water pump.

Check to see the new pump is the correct one. Also check fan, hub, and pulley fit on the new pump shaft.

Fan and fan shroud usually have to come out simultaneously. Be careful not to bend or damage radiator fins during this operation.

tern. Start with the top one, then the bottom, top left, bottom right, etc.

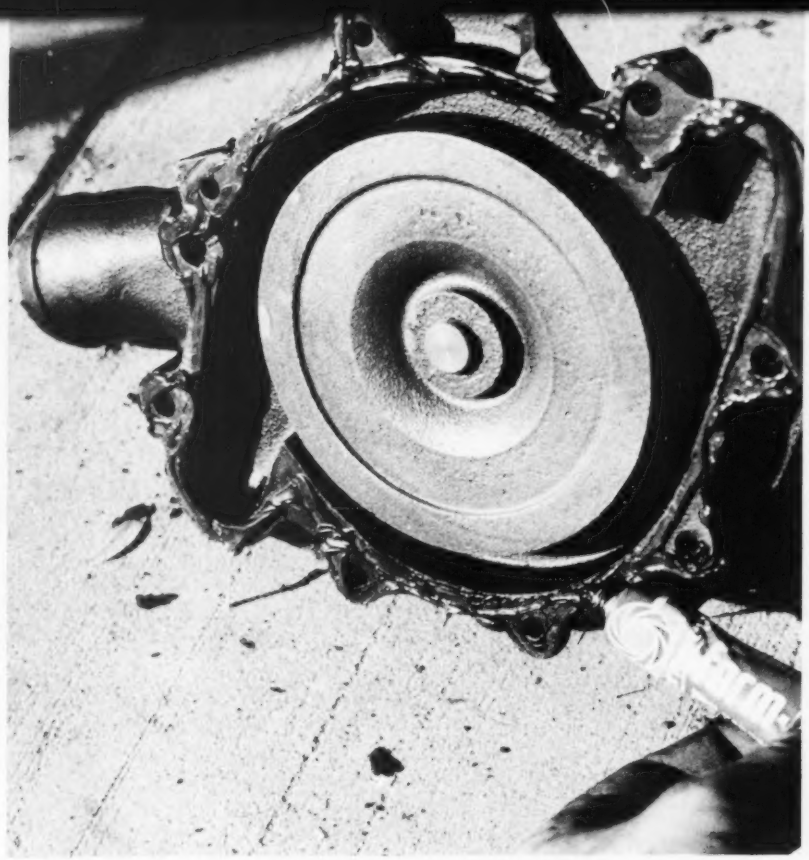
Reinstall the drive belts and the pump pulley, taking care that the correct belts are in the correct pulley sheaves. Reinstall the fan and fan shroud, and the lower hose. If you had the radiator out, now is the time to plunk it back in. Connect the miscellaneous hoses, tubes, wires, etc., that you had to remove. Reinstall radiator hold down bolts and panels. Double check all nuts, bolts, and hose connections. Don't forget to tighten the T-shaped water petcock.

Fill the radiator with plain water and start 'er up. Check for any leaks, but be careful to stay away from the fan. If no leaks appear, reinstall the radiator cap and turn on the heater full blast. This will purge trapped air from the heater core. When the engine reaches operating temperature, bleed off pressure with the safety-type radiator cap you have so prudently installed. Remove the cap and you'll notice the water level has gone down. This was caused by the thermostat opening at operating temperature and letting water into the block. Refill the radiator to about one inch below the filler neck, put the cap on and go for a drive.

When you return from your drive, recheck for leaks. If all systems are GO, let the beast cool and redrain the radiator. Put in the proper amount of all-season antifreeze (radiator capacity can be found in your owner's manual) and top off with water using the same procedure as in the last paragraph.

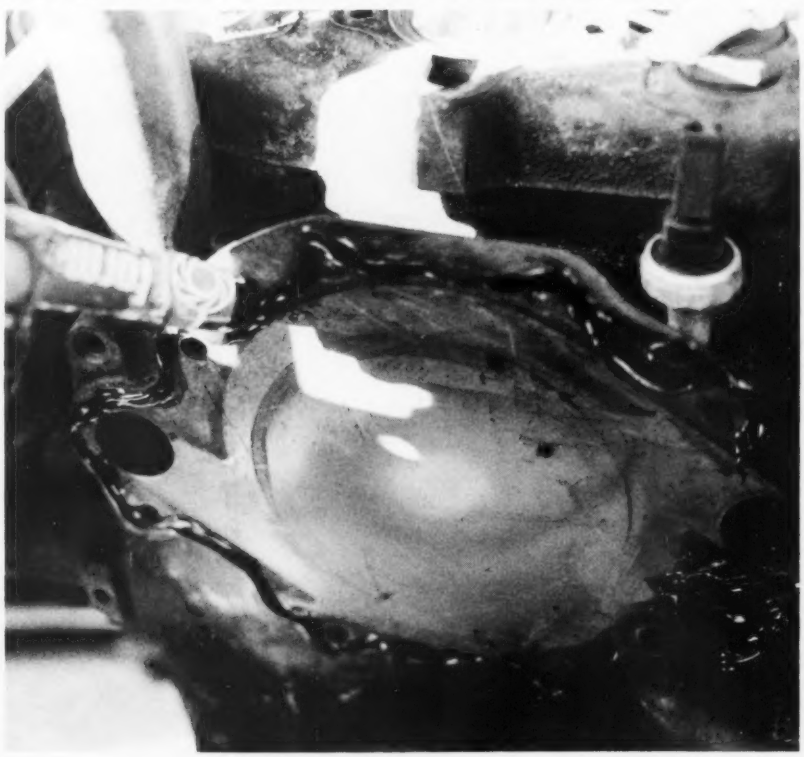
Did we mention that this job would be a good time to check the condition of the belts, hoses, and thermostat and replace if necessary?

Drivers' Flat Rate Manual says that this job should take four sodas or five coffees per man. Smokers should expect it to be at least a 10 cigarette job. Like we said, it's a greasy task, but hand cleaner retails for about $1.30 per can and that beats $20 to $50 any time.



Apply gasket cement as per label directions. Some brands go on all surfaces, some on one surface only, etc.

After insuring that the pump mating surfaces on the block are scraped clean, apply the gasket cement. Don't stint, but don't block any water passages or bolt holes either.



Diesel Fuel

We occasionally receive inquiries from readers with diesel cars concerning the availability of fuel. Granted, you can save considerable money on fuel with a diesel car or pickup but most gas stations don't carry it. And what do you do on a long trip?

There are thousands of service stations in the U.S. which carry diesel fuel, as truckers well know. A recent book entitled "Diesel Fuel and Truck Stop Guide" lists all the diesel pumps and truck stops around the country with detailed maps of every state. The book is also useful to general travelers, especially trailer and motor home owners. It lists hours, sleeping quarters, meals, and types of fuel and service. Further information and the price of the book are available by writing: Edna Connelly Publishing, Dept. TS, P.O. Box 321, Placentia, CA 92670.

Fred Budinger

The name Fred Budinger won't mean much to most of our readers but, in Air Force traffic and industrial safety circles, it does and should.

"Bud" retired December 31, 1975. Officially, he was a GS-14 traffic safety engineer for the Air Force Inspection and Safety Center at Norton AFB, CA. But, more importantly, he is a totally dedicated man who remained attuned during a 32-year safety career to the needs and problems of our younger drivers. He personally reviewed and critiqued nearly every article published by DRIVER since its inception in 1967 and also contributed several stories. His ideas and influence on automobile and motorcycle safety alone will benefit members of the military for years to come. DRIVER says "thanks" for all of its readers.

NEW MAGAZINE—A preview of the first issue of MAINTENANCE Magazine has the attention of Airman Michael J. Valenta and TSgt Harry Gethers of the 35th Field Maintenance Squadron at George AFB, California. The new Air Force quarterly is designed to interest and encourage the aircraft and weapons maintenance technician to work safely and effectively. The first issue of the small but lively 64-pager hits the field in February.

Auto Hotline

A new toll-free number has been established for answers to consumers' questions about safety-related problems and automobile recalls. By dialing 800-424-0123, a consumer may obtain the defect-history of a used car model he is considering buying, or even answers to questions concerning product recalls, such as tires. Because the hotline is now only a pilot program, it services customers in 10 states and Washington, D.C. Eventually, the National Highway Transportation Safety Administration hopes to set up a permanent national hotline.

Meantime, DRIVER readers can be serviced by the hotline in Connecticut; Delaware; Washington, D.C.; Maryland; New Jersey; New York City, Long Island, Buffalo, N.Y.; North Carolina; southern Ohio (513 and 614 area codes); Pennsylvania; Virginia; and West Virginia.

Pass It On

The copy of DRIVER you're reading now is intended to reach 9 other people. Please pass it along.

If your office sometimes receives more copies than you need, don't throw them away. Take a minute to send the extras to a unit on your installation that has a lot of younger people.

DRIVER is directed primarily to 18 to 25-year-olds. Not that we don't value you readers who are old enough to run for Congress. We do. But it's the young ones we're after, and they're not always easy to catch!

About Miss DRIVER

(See page 13)

Nineteen-year-old Rebecca ("Becky") Mae Halbrook is a full-time student at Southern Illinois University. The petite sophomore is majoring in Elementary Education and Special Education, and works part-time as a medical receptionist. Becky, who comes from Granite City, Illinois, told us that the loss of a neighborhood girlfriend in a traffic accident really made her aware of the importance of responsible driving.

EMERGENCY
Vehicle Training

It's normal to see ambulances positioned *around* a race track but to see an Air Force ambulance *on* the track, running a chicane (pylon avoidance course), well, it's in the same league as school bus drags . . . it just doesn't look real.

But for the Emergency Medical Technicians (EMT) at the March AFB Hospital, it's real. Due to a new California ordinance, all drivers of emergency vehicles must graduate from a certified performance driving school. The result of this law is another first for the March AFB Hospital.

Late in September 1975, four March AFB medical technicians and their training officer, Capt Cathy Tryon, put an Air Force ambulance through the Riverside (Calif.) Driver Awareness School (RDAS) at Riverside Raceway.

Instructor Bruce Harmer of RDAS first explained the reason for the course. He told how emergency vehicle operators must be aware that their driving can affect the lives of their patients, both by the driver's accident avoidance techniques and by smooth driving habits which allow the medical technicians to give aid to the patient while being transported to a medical facility.

The second order of business was to use a Mazda sedan to familiarize the EMTs with the layout of the serpentine handling course. The technicians each drove the Mazda three times. Once slowly, once quickly, and once in *reverse* gear!

Instructor Harmer explained that while *most* drivers could competently negotiate the course while driving forward, backing up really opened the eyes of some of the students. The EMTs were made aware that backing up safely was an important part of emergency vehicle operation. The techs agreed that it wouldn't do to transport a patient safely to the hospital only to bang him about inside the ambulance as it backs up to the Emergency Room platform and crunches a steel guardpost.

After the Mazda exercise, the ambulance was put through the paces. The EMTs found that a three-ton ambulance does indeed handle differently at speed than their personal cars.

While one tech drove, another acted as an attendant, and a third was strapped to the litter, simulating a patient. The results were unanimous. All the techs agreed that while it was a little nerve-wracking to drive an ambulance quickly, it was much harder to be the attendant trying to administer medication, and more difficult yet to act as a patient.

A1C Richard Beane put it this way: "When we rode as patients we could really see how smooth driving could affect you. Because you're lying down, you're a little disoriented relative to the movement of the coach. Each time it turns, you feel like it's going to roll over. Add to that a patient's state of mind . . . like he's injured or in pain, worried about himself and his kin, worried about how the ambulance attendant is going to give him that shot while the ambulance is moving, all those things. I can really see why a driver has more to think about than just getting to the hospital quickly, he's got to consider the patient's needs, too."

The techs also agreed that trying to administer medication or CPR (cardiopulmonary resuscitation) would be almost impossible if the driver wasn't concentrating on smoothness as well as speed.

The next exercise was a braking refresher. RDAS's training ambulance was used for this one. The techs had to make three stops, one each from 40, 50 and 60 mph. And they had a lane only 225 feet long and two feet wider than the ambulance in which to do it! The fellows relearned their basic driving lessons. A fast, straight stop, and squealing, smoking tires are not compatible.

Then it was off to the skid pad, this time with the Mazda. Take one 60-foot circle, add oil and soap, water, and a speeding Mazda sedan, and that's the RDAS skid pad. A continuance of basic accident avoidance techniques, the skid pad teaches about understeer, oversteer, and the limits of traction. Under Bruce's instruction the techs learned how to correct understeer (front end "push") by decreasing power, and ovresteer (rear slides to the outside of a turn) by a combination of steering corrections and throttle application. Bruce pointed out that the skidpad training was equally important in everyday accident avoidance, but how many of us ever get to experience it except in an accident situation?

The balance of the day was spent in relearning lane changing techniques with the heavy ambulance, and actually navigating the ambulance around the Riverside International Raceway.

Once again, the techs learned that their regular driving skill has to be polished a bit, or altered in some cases, to transport a patient safely. Riverside Raceway has all the turns, hills, straights, etc., that an ambulance driver would encounter, and then some. How about trying to herd a three-ton ambulance through a blind, 90-degree turn at the end of a high-speed straight? If it's a bad turn in a regular car, it'll be twice as bad in a heavy, high-centered ambulance. And when you add the patient's need for a smooth ride to the urgency of the run, you can see why an ambulance driver's skills must be honed razor sharp.

The accident avoidance techniques and handling skills taught at RDAS made better drivers of the emergency medical technicians from March AFB, from an emergency response point of view as well as in routine driving tasks. If there's such a school in your area, you might check it out. The course is fun as well as being educational, and who among us couldn't use that extra little margin of safety?

(right)
The skid pad was the high point of the day. Not only did the techs learn valuable handling skills, they had a ball doing it.

This may sound like all fun and games, but it's not. All military drivers are expected to comply with the tri-service publication for emergency vehicles

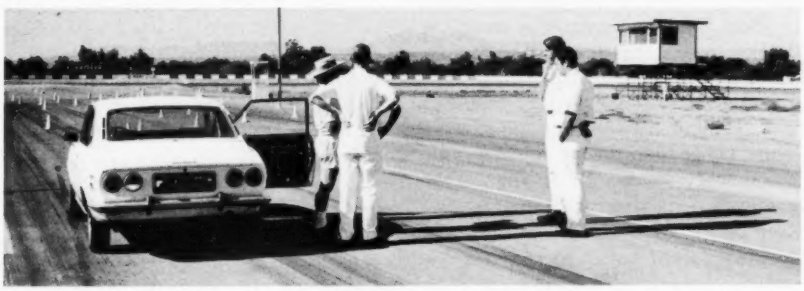
A three-ton ambulance doesn't handle like your regular station wagon. March AFB medical technicians put 73B450 through the pylons and learn that while it's a good ambulance it won't win any Grand Prix.

Being inside the ambulance during pylon avoidance training gives you a whole new perspective. If you are a patient, it's hard to convince yourself that you'll make it to the hospital without rolling over.

(right)
Backing an ambulance is really tough. Even with the required spotter, the trainees knocked down pylons continually until they got the hang of it.

(below)
"After you, Alphonse." "No, after you, Gaston." Nobody wanted to be the first one through the pylons. After they found out the Mazda would really handle, though, it was hard to pry them away.

(below)
It took a lot of practice to bring the heavy ambulance to a smooth, quick stop without making the "patient" uneasy.



BACKFIRE

LETTERS TO THE EDITOR

Address your letters to:
Editor
DRIVER Magazine
AFISC/SEDD
Norton AFB CA 92409

DUAL WHEEL REMOVAL

The enclosed photo which accompanied your article "The Big Freeze is Coming" (Oct. '75 issue) caught my eye as I have a similar camper on the same Chevrolet chassis. As I looked closer at the photo, I realized that the owner of the camper had – perhaps in an

effort to economize – removed the dual wheels from the rear axle. As six or seven new truck tires command quite a price, his action is not unique.

However, by removing the dual wheels, he forfeits the added safety built into the vehicle; has less traction; and may, if he does not upgrade the ply-rating of replacement tires, overload them. As my vehicle has a designed gross weight of over 8,900 pounds, I certainly wouldn't recommend this practice regardless of the savings. One blowout at highway speeds could ruin your entire day. On top of that, the driver's insurance company might take a dim view of his modification should there be an accident.

Lt Col John W. Peterson, USAF
Director of Information
Hq, 26th Air Division
Luke AFB, AZ 85031

Thank you for catching this example of a dangerous practice.

MOTHBALLING

In the September 1975 issue, the article entitled "Operation Mothball' says to mix a three- or four-quart batch of kerosene and oil for coating the inside of the gas tank. I need to know what ratio of kerosene and oil to mix.

DRIVER is great, keep up the good work. You publish a lot of needed information.

TSgt Eugene R. Canady, Jr, USAF
4602d Computer Services Sqdn
Peterson Field, CO 80914

The ratio is three quarts of kerosene to one quart of oil. Another point we overlooked is to make a checklist at the time you accomplish the mothballing. This way you can follow the checklist in reverse when you return, thereby making sure you remove all the cloths, etc., that you installed.

While reading "Operation Mothball," I noticed something I think is not very advisable. Granted, placing a car on blocks as shown in the photo on page 19 (Sep '75 issue) eases the strain on shocks, wheel bearings, etc. But, it would not take an amateur wheel thief five minutes to roll away four beautiful tires. Think that I will keep mine on all fours! Other than that, I enjoyed your article very much. Also, your other articles on driving are outstanding. Keep up the good work!!!

RM3 David P. Henricks
USNCS Box 67
Control Division
FPO Seattle 98762

This is a good point, and it is why Don Holt, our Tech Editor, mentioned removing the wheels and notifying the Security Police when the car is stored outdoors as shown. Your letter gives us the opportunity to remind our other readers that the car is a sitting duck – on blocks or not.

BEING "VISIBLE VS BEING SEEN"

Colonel Low hits home with his letter printed in the November "Backfire" column and most experienced riders are aware of the truth behind his comments. There is a huge difference between being "visible" and being "seen." Put a rider on a gold BMW, turn the headlight on, dress him in a reflective vest and an orange helmet . . . then put a guy on a black Harley wearing a black leather jacket and a shortie helmet. Guess who the average driver will see first? The guy on the Harley just might be a cop – he's the one who (as the Colonel points out) represents a possible threat. The fact of being "seen" is based on a psychological reaction – not strictly a sensory one.

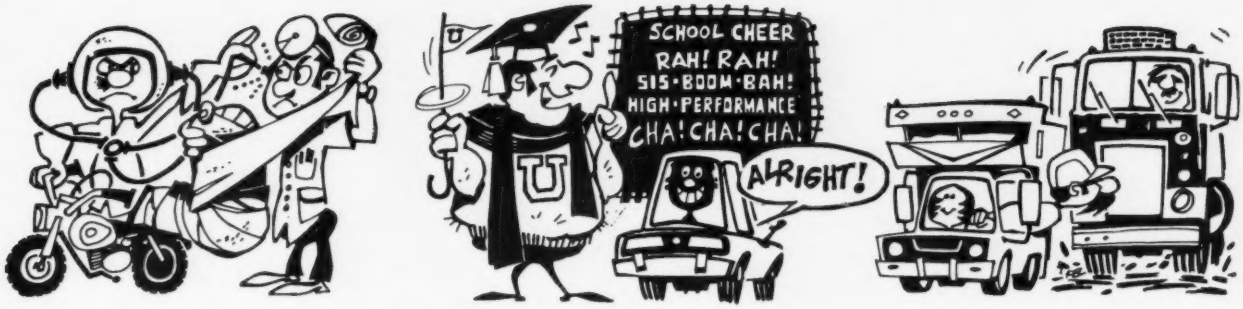
You guys at DRIVER are doing a fine job with motorcycle safety. Please keep printing those pro and con letters to let cyclists know what sort of mentality they're up against when they get on the streets.

Roger Hull, Editor
ROAD RIDER Magazine
P.O. Box 678
South Laguna, CA 92677

MOTORCYCLIST'S VIEWPOINT

I would like to commend you for your answer to Capt Norman Ronic (MC) USN in the Oct '75 issue. His point of view, I feel, was not one of a doctor but that of an automobile driver with a prejudiced view towards motorcycling and motorcyclists in general. He sounds as if he remembers all the old movies of how we are supposed to act and appear, instead of what we are today. He has probably never seen one of his fellow doctors riding a motorcycle safely and enjoying every minute of it.

If motorcyclists were treated like taxpaying citizens on the highways, maybe there would be fewer motorcycle accidents. As you pointed out, sixty percent of the motorcycle accidents



are caused by the auto driver but the bike rider is still just as dead. Instead of people thinking of ghastly and horrible ways to frighten people into not riding motorcycles, they shoud look at themselves and other people like them who will take a small percentage of people involved and make it sound like the ultimate answer to the population explosion.

For each motorcyclist who has had an accident there are a great number who have not. If someone were to survey all riders I'm sure the results would show that the greatest percentage of riders have not had an accident. There are more people than I care to count that have ridden longer than my 13 years accident-free. Those of us that have not had any problems aren't lucky as some people might think. We protect ourselves every minute we are on our machines. Not with steel and seat belts but with good, common sense and the knowledge that the only people concerned with our safety are ourselves and other motorcycle riders. We know we are invisible, but the old "I'm sorry, I didn't see him" is getting hard to swallow.

Instead of condemning a motorcyclist to a life in hell, the next time you see a motorcyclist smile and wave. Who knows, he might just smile and wave back.

SSgt Charles H. Champion, USAF
Pres., Gateway Motorcycle Club
Lackland AFB, TX 78236

Right on!

HIGH PERFORMANCE DRIVING SCHOOLS

About a year ago you ran an article concerning a driving school. I'm presently stationed in Panama and when I return to the states I would like to improve my driving skills as well as learn high performance driving. I would appreciate information about this school, or any other high performance driving school.

L/Cpl Michael Clinnertz
Marine Barracks
15th Naval District
FPO New York 09585

The school we wrote about last January was Bob Bondurant's School of High Performance Driving, Sears Point International Raceway, Sonoma, California.

There are 20 or so centers now offering the Advanced Driver Education course developed by General Motors. Most of them are located at universities in the eastern half of the U.S. If you are interested, you could write to the center at Appalachian State University, Boone, North Carolina, or to the center at Central Missouri State University, Warrensburg, Missouri.

Certain military emergency vehicle drivers are eligible for training at the Driver Improvement Course, Cape May Coast Guard Station, Cape May, New Jersey. This excellent driver's survival school was featured in both the February and December '73 issues of DRIVER.

WEST COAST MIRRORS

I just finished reading the October '75 DRIVER and want to comment on a letter you published about West Coast mirrors having blind spots.

I have West Coast mirrors (junior) on my 1970 Mini Motor home and don't have this problem because I bought what are called "blind spot mirrors." Some are round – others rectangular, and they eliminate the blind spot. But you must remember that these mirrors offer no depth perception.

The real reason for the mirrors is to see if there is a vehicle passing you. They are very effective, and I recommend them for any large truck, motor home, or auto pulling a travel trailer.

I hope this information may save someone's life.

I enjoy DRIVER very much.

SSgt William G. Swartz, USAF
Davis-Monthan AFB, AZ 85707

The letter you refer to discussed the blind spot in front and side vision created by these large mirrors, not the blind spot due to incomplete rearward coverage. Anyway, we agree with you that the addition of a small "fisheye" type mirror to the large truck mirror can be useful. Many professional bus drivers and truck drivers use them. Because of the extreme visual distortion, however, it's best to use them only as an alert to the presence of a nearby vehicle which should then be verified in the larger mirror, and further checked by turning your head.

TRACTION COMPOUNDS

Some time ago there were ads for spray-type anti-skid products to spray on tires to give temporary added traction for short periods when stuck on ice. Also in this time period someone came out with the suggestion to use Clorox bleach to get the same results. My question is: Does Clorox give you any more traction?

Mr. John I. Goetschius
Hq 3rd Weather Wing
Offutt AFB, NE 68113

According to Goodyear's Tire Compound Division, commercial traction compounds, as well as household bleach, have little effect. Our October '75 issue's "Big Freeze" article contains some good information concerning traction on ice.

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EMERGENCY!

SKIDDING!

- Take your foot off the accelerator immediately.
- Turn the front wheels in the direction of the skid. Don't oversteer.
- If the car then skids in the other direction, turn front wheels in that direction. Don't give up!
- When the car regains rolling traction, straighten the wheels.
- *Never* slam on the brakes in a skid. This locks the wheels, throwing the car out of control.
- To slow down on ice, fast and hard jabs on the brake pedal will keep the wheels rolling.